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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,177	08/21/2001	Gerhard K. Hering	44223/237184	9094

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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,177

Applicant(s)

HERING ET AL.

Examiner

John L. Goff

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1-4. 6) ☐ Other:

Art Unit: 1733

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, Species II-B (Claims 16-38) in the papers received 5/22/03 and 11/17/03 is acknowledged.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 16 and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7 and 8 of copending Application No. 10/193,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because while 10/193,661 does not specifically teach using cut pieces of thermoplastic material, 10/193,661 is not limited to any particular method for supplying the pieces of thermoplastic material such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the pieces of thermoplastic material taught by 10/193,661 cut pieces of thermoplastic material so that the pieces may be

Art Unit: 1733

formed and supplied in a continuous manner from a continuous source thus improving the efficiency of forming the cellular block.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1733

7. Claims 16, 18, 20-24, 27, 29, 30, and 34-38 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fell (U.S. Patent 5,139,596).

Fell discloses a continuous process for forming expanded, honeycomb cellular block by joining multiple pieces of thermoplastic material to an existing cellular block. Fell teaches a method comprising providing a honeycomb cellular block, inserting a first set of welding mechanisms (1 of Figure 1 and Figure 2-A) into the top layer of cells of the cellular block, inserting a second set of welding mechanisms into the antinode depressions in the top of the cellular block (4 of Figure 1 and Figure 2-A), supplying a first piece of thermoplastic material (from a carrying mechanism (35 of Figure 4 and Figures 9-10C)) on top of the second set of welding mechanisms, heating a plurality of opposing longitudinal strips (5 of Figure 2-A) on the surface of the piece of thermoplastic material and the existing cellular block to their welding temperatures, pressing the plurality of longitudinal strips on each surface of the piece of thermoplastic material and the existing cellular block together using a rolling mechanism (Figure 4) or platen mechanism (Figure 3) such that nips are created (between the rolling mechanism or platen mechanism and the first welding mechanism) to weld (i.e. thermally fuse) the piece of thermoplastic material to the existing cellular block, and repeating the above steps for any number of pieces of thermoplastic material wherein each successive weld is offset from the first in the lateral direction (which requires repositioning the first or second welding mechanism and lateral movement of the pressing mechanism) (Column 9, lines 17-23, 26-28, and 34-45 and Column 10, lines 43-44 and Column 11, lines 40-44 and Column 12, lines 37-43 and 58-68 and Column 13, lines 1-4, 21-26, 42-43). It is noted Fell shows supplying the pieces of thermoplastic

Art Unit: 1733

material from a continuous source such that cutting the pieces from the source appears inherent to Fell. In any event it would have been obvious to one of ordinary skill in the art at the time the invention was made to cut/sever the pieces of thermoplastic material taught by Fell from the continuous source such that individual rows of thermoplastic cells could be built up on the existing cellular block.

Regarding claim 20, Fell teaches the rolling mechanism may comprise a plurality of spaced apart rolling contact regions that are spaced apart from one another in a lateral direction that is generally perpendicular to the longitudinal direction (Column 12, lines 58-68 and Column 13, lines 1-4).

8. Claims 17 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fell as applied in paragraph 7 above, and further in view of the admitted prior art (Specification page 1).

Fell as applied above teaches all of the limitations in claims 17 and 32 except for a specific teaching of how to expand the cellular block. However, it is noted Fell is not limited to any particular method such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to expand the cellular block using any well known and conventional method in the art such as that suggested by the admitted prior art wherein only the expected results would be achieved.

The admitted prior art discloses it is known to thermally fuse thermoplastic material to an expandable cellular block and then, heat and pull on the block to expand and convert it into a honeycomb structure (Specification page 1, lines 11-14).

9. Claims 19, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fell as applied in paragraph 7 above, and further in view of Casella (U.S. Patent 5,399,221).

Art Unit: 1733

Fell as applied above teaches all of the limitations in claims 19, 28, and 31 except for a specific teaching using thermoplastic nonwoven material. However, it is noted Fell is not limited to any particular thermoplastic material such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use in Fell any well known and conventional thermoplastic material used in the cellular block forming art such as thermoplastic nonwoven as suggested by Casella as only the expected results would be achieved.

Casella disclose a process for thermally fusing thermoplastic material to an expandable cellular block. Casella teach using woven or nonwoven thermoplastic material (Figure 4 and lines 52-59).

10. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fell.

Fell is described above in paragraph 7. Fell is silent as to the orientation of the welding apparatus. However, Fell is not limited to any particular orientation such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the welding apparatus in a manner wherein the pieces of thermoplastic material are added in an upright orientation such that there is an unlimited outlet path for the continuous production of the cellular block.

Allowable Subject Matter

11. Claims 25 and 26 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest supplying a cut piece of thermoplastic material to be bonded to a cellular block by engaging the cut piece of thermoplastic material with

Art Unit: 1733

a plurality of spaced apart protrusions wherein the protrusions move the thermoplastic material to a position proximate the cellular block and the thermoplastic material is bonded to the cellular block by a plurality of welding mechanisms that move out from slots between adjacent protrusions to engage and weld the thermoplastic material to the cellular block.

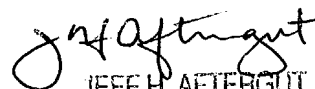
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



John L. Goff
January 21, 2004



JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300